

Practitioner's Docket No.: 811_001

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Yuji KATSUDA, Jun YOSHIKAWA, Masaaki MASUDA and
Chikashi IHARA

Filed: Concurrently Herewith

For: A MATERIAL OF LOW VOLUME RESISTIVITY, AN ALUMINUM
NITRIDE SINTERED BODY AND A MEMBER USED FOR THE
PRODUCTION OF SEMICONDUCTORS

Box Patent Application
Assistant Commissioner for Patents
Washington DC 20231

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 addressed to the **Box Patent Application, Assistant Commissioner for Patents, Washington D.C. 20231** on October 18, 2001 under "EXPRESS MAIL" mailing label number **EL872580111US**.

Elizabeth A. VanAntwerp
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PRELIMINARY AMENDMENT

Sir:

Prior to examination, Applicants wish to amend the subject application as follows:

In the Specification:

Page 1, after the title, insert the following:

Cross Reference to Related Application

This application is a non-provisional application of U.S. Provisional Application No. 60/297,224, filed June 8, 2001, the entirety of which is incorporated herein by reference.

Page 4, between lines 21 and 22, please insert the following paragraph:

The file of this patent contains at least one drawing executed in color. Copies of this patent with color drawing(s) will be provided by the Patent and Trademark Office upon request and payment of the necessary fee.

In the Claims:

Please rewrite claims 3-5, 8-10 and 14 as follows:

3. (Amended) The material of claim 1, wherein said sintered body comprises aluminum nitride grains having a mean diameter of not lower than 3 μm .
4. (Amended) The material of claim 1, wherein the molar ratio of said converted content of samarium calculated as samarium oxide to a calculated content of aluminum oxide ($\text{Sm}_2\text{O}_3/\text{Al}_2\text{O}_3$) is 0.05 to 0.5.
5. (Amended) The material of claim 1, wherein said sintered body has an activation energy of temperature dependency of volume resistivity from room temperature to 300 °C of not higher than 0.4 eV.
8. (Amended) The material of claim 1, wherein said sintered body has a lightness of not higher than N4 measured according to JIS Z8721.
9. (Amended) The material of claim 1, wherein said sintered body contains one or more metal element selected from the group consisting of metal elements belonging to the periodic table IVA, VA, VIA, VIIA and VIIIA in a content calculated as metal element of not lower than 0.01 weight percent.
10. (Amended) The material of claim 1, wherein said sintered body contains at least one second rare earth element other than samarium, and wherein the molar ratio of a converted content of said second rare earth element calculated as rare earth oxide to said converted content of samarium calculated as samarium oxide (said converted content of said second rare earth element/said converted content of samarium) is not higher than 2.0.
14. (Amended) The sintered body of claim 12, having a volume resistivity at room temperature of not higher than $1 \times 10^{13} \Omega \cdot \text{cm}$.

REMARKS

Prior to examination, Applicants respectfully request entry of this Amendment in which the specification has been amended to correct minor informalities.

Claims 1-75 are pending herein. Applicants have amended the claims to eliminate multiple dependent claims. No new matter has been added. Applicants believe the case is now in condition for examination.

Attached hereto as pages 4 and 5 captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE" is a marked-up version of the changes made to the specification and claims by the current Amendment.

If the Examiner believes that contact with applicants' attorney would be advantageous toward the disposition of this case, he or she is herein requested to call applicants' attorney at the phone number noted below.

Respectfully submitted,



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October 18, 2001
Date

KCB/eav

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